

REMARKS

Upon entry of the above amendments, claims 70-121 will remain pending. Applicant respectfully requests reconsideration and allowance in view of the following remarks.

In the Office Action, claims 70-76, 79-87, 90-95, 98-109, and 112-121 are rejected under 35 USC § 103(a) as being unpatentable over Silver (US Patent No. 6,931,603) in view of Gedeon (Gedeon, "Applying Machine Vision In Electrical Component Manufacturing"). Claims 77-78, 96-97, and 110-111 are rejected under 35 USC § 103(a) as being unpatentable over Silver et al. in view of Gedeon and Edwards, et al. (Edwards, et al., "Machine Vision and Its Integration with CIM Systems in the Electronics Manufacturing Industry"). Claims 88-89 are rejected under 35 USC § 103(a) as being unpatentable over Silver et al. in view of Gedeon and Taylor (US Patent No. 6,813,621).

Background

In the last-filed Response, which was filed along with an RCE, Applicants stated the following:

"Applicants pointed out that each of the independent claims pending at that time, i.e., claims 1, 19, 39, 51, and 69, recited, among other limitations, sending (in some claims) or receiving (in others), via a communications network, image data, an indication of a selected vision tool, and at least one vision tool parameter corresponding to the vision tool, from one computer to a remotely located other computer that includes the vision tool."

"Applicants asserted that Vazquez et al. failed to teach these limitations, and that none of the references of record (including Parulski et al.), alone or in any

proper combination, remedies these distinctions over Vazquez et al. The current Final Office Action is a repeat of the same rejections and thus seems to have the same problems asserted by Applicants in the May 26, 2008 Response.

Accordingly, Applicants' representative contacted Supervisory Patent Examiner Wei Zhen, to seek a more constructive way to move along the prosecution of this case."

"The Supervisory Patent Examiner suggested that limitations be added to the independent claims that more explicitly recite that the vision tools include certain types of vision tools, to further distinguish the claims from non-machine vision image processing systems. Accordingly, Applicants have submitted new claims, which include new independent claims 70, 105, 118, 119, and 120, each of which recites that the machine vision engine includes a set of individually selectable vision tools, having been configured to, when selected, carry out vision operations including pattern location. Various dependent claims further define the vision operations, for example, as including guidance, inspection, gauging, or identification. Other dependent claims further recite that the vision operations include a selectable guidance vision tool configured to, when selected, (i) obtain guidance operation vision tool parameters including a model pattern and alignment operation constraints, and (ii) carry out a corresponding guidance operation corresponding to the obtained guidance operation vision tool parameters. Other changes are also reflected in the newly submitted claims."

"Each of the independent claims recites, among other limitations, either sending or receiving (depending on the claim) image data and corresponding

vision tool parameters, the image data including at least one given image to be analyzed by selected one or more given vision tools.”

“As previously stressed by Applicants, Vasquez et al. teach, at most, the storing of code remotely, which may be brought into a local machine and executed in the local machine. In contrast, Applicants recite, for example, in independent claim 70, a computer including a vision tool parameters input configured to receive, at the computer, corresponding vision tool parameters corresponding to at least one of the selected one or more given vision tools. The claim further recites a transmitter configured to send, from the computer to a remote machine vision engine and via a communications network, (i) image data including at least one given image to be analyzed by the selected one or more given vision tools, and (ii) corresponding vision tool parameters.”

“Applicants submit that none of the references of record, including Vasquez et al. and Parulski et al., provides any teaching, which would properly support a combination/modification of references that includes these limitations.”

“The present application explains, for example, at page 2, lines 14-19, of the present Specification, that it is difficult for users to maintain machine vision systems in the field. For example, it may be challenging to update a machine vision system to a new version of software, or a new license, after it has been installed on a manufacturing production line. Moreover, customers wishing to test proprietary machine vision software on a particular part may not want to have to purchase and install the software and the associated licenses. The need to

purchase and install the software and its associated licenses can therefore become a significant deterrent to "quick turn" software development."

"Applicants have included limitations in the independent claims which help solve this problem recognized by Applicants."

"Accordingly, Applicants submit that each of the claims now pending is patentable under 35 U.S.C. § 102 and § 103."

"Applicants note that, Applicants' representative, during the telephone conversation with Supervisory Patent Examiner, asked if a Request for Continued Examination would be necessary in order for the Examiner to allow entry of the new claims. The Supervisory Patent Examiner indicated that a Request for Continued Examination would be necessary, but confirmed that the next Office Action will not be made Final, and that it would not be necessary for Applicants to await an Advisory Action refusing entry of the new claims in order to ensure that the next Office Action will not be made Final."

In the Office Action dated February 27, 2009, at page 16, in the Response to Arguments section, the Examiner states that "[t]he examiner wants to point out the discussion prior to filing RCE did not involve a Supervisory Patent Examiner." The undersigned is curious as to what is meant by this statement, and requests clarification. Is the Examiner suggesting that the undersigned was mistaken as to the identity of the person he was talking to, and that it was in fact Examiner Wang talking on the phone rather than SPE Wei Zhen?

Applicants reiterate their desire to move this application along, and thus expended significant effort to present new claims and to explain their significance.

The Current Rejections

The current rejections are based on a primary reference Silver. Silver has a filing date of December 22, 2000 – just four months prior to the April 27, 2001 filing date of the instant application. As such, it is apparent that the Examiner is asserting Silver as prior art pursuant to 35 USC § 102(e), in an obviousness combination. The instant application and Silver were each assigned (and obligated to be assigned) to Cognex Corporation. Accordingly, Silver does not qualify as prior art per 35 U.S.C. Section 103(c), and Applicants request that the prior art rejections be withdrawn.

While the rejections should be withdrawn because Silver does not qualify as a reference per Section 103(c), Applicant nonetheless submits that the independent claims recite limitations not rendered obvious by the asserted combinations even if one were to assume Silver is a proper Section 103 reference. Absent the impermissible use of Applicant's own disclosure in hindsight, there is nothing in either Silver or Gedeon which provides any basis in evidence as to why one of ordinary skill in the art would even consider modifying the Silver patent system to include a " . . . vision system that can examine the geometry of the product, including features such as edge locations . . . " as taught by Gedeon. (Gedeon, page 738, right col., 5th para.).

The Examiner's contention is that "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Gedeon into the teachings of Silver to include the limitation disclosed by Gedeon. The modification would have been obvious to one of ordinary skill in the art to want to be able to inspect parts of possible defects as suggested by Gedeon." (2/27/09 Office Action, Page 4). Applicant respectfully points out that this purported motivation to modify Silver is conclusory, and based entirely on reference

to Gedeon without providing any explanation as to why one would be motivated to modify the Silver system.

In order for a claim to be rejected pursuant to 35 USC § 103(a), there must be some basis in the evidence itself that would indicate – absent impermissible hindsight – that one of ordinary skill in the art would have considered such a modification at the time of the invention.

Other references that have been applied to reject the claims include Edwards, and Taylor. Edwards is directed to integration of Machine Vision with systems in the electronics manufacturing industry. Taylor is directed toward the use of a computer system to read and write graphical images. None of these reference provides any teaching to remedy the above-listed deficiencies in Silver and Gedeon. Thus, all claims 70-121 should be allowed.

For the reasons stated above, Applicant submits that each of the claims, numbered 71-121, pending in the present application is patentable under each references standing alone or in any proper combination with any other references of record under 35 USC Sections 102 and 103.

In view of the foregoing, reconsideration and allowance of all claims are respectfully requested. A notice to that effect is earnestly solicited.

Should the Examiner have any questions, the Examiner is requested contact the undersigned at the below-listed telephone number.

Respectfully submitted,

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